

**Treatment Option Case Study - Hawaii**  
(proposed management system)

**Conservation Effects Worksheet**

Grazing Land - Range  
(land use and crop)

**Resource Setting:** Kamuela, Hawaii

Waimea Soils, 6 - 20 % slopes.

**Present Management System:**

Planned Grazing System (556)

Proper Grazing Use (528)

Electric Fencing (382)

Pipeline (516)

Trough (614)

**Resource Problems Before Treatment:**

Overgrazing

Sheet and rill erosion

Gully erosion

Wind erosion

Sedimentation runoff

<b>ACTIONS</b> (Kinds, Amounts, Timing)	<b>EFFECTS</b> (Effects of Continuing Bench System)
<p>Planned Grazing System (556) A 10,000 acre 375 cow/calf intensive grazing system 10 - 1,000 acre paddocks will be constructed with electric fencing during a 4 week period. The cattle will be rotated every 3 to 5 days depending on condition of paddocks. Fencing (382) Design and install electric livestock fence for grazing system.</p> <p>Pipeline (516) Design and install for grazing paddocks.</p> <p>Trough (614) Design and install for grazing paddocks.</p>	<p>RMS INSTALLED</p> <p>Soil loss 4 tons/acre</p> <p>Increase herd size</p> <p>Increase pasture quality</p> <p>Reduce soil compaction</p> <p>Increase ground cover</p> <p>Reduce soil erosion</p> <p>Increase filtering effect</p> <p>Improve water quality</p> <p>Enhance wildlife habitat</p> <p>Machinery</p> <ul style="list-style-type: none"> <li>- 30 hp tractor</li> <li>- 4X4 truck</li> <li>- Post hole auger</li> </ul> <p>Fencing</p> <ul style="list-style-type: none"> <li>- \$0.24/feet</li> <li>- \$1,267/mile (includes solar energizer)</li> </ul> <p>Pipeline</p> <p>1 in. Black Polyethylene \$0.48/feet</p> <p>1 1/2 in. Black Polyethylene \$0.81/feet</p> <p>2 in. Black Polyethylene \$1.14/feet</p> <p>Trough</p> <p>300 gal fiberglass trough \$450</p> <p>Fuel</p> <p>Cow/calf planned grazing system 10 gal/wk.</p> <p>Instillation 80 gal for 4 weeks.</p>
<p><b>Comments:</b></p>	